

## Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

### Listing of Claims:

Claims 1-2. **[Canceled]**

Claim 3. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ **claim 37**, wherein said one or more reagent(s) include a reducing reagent.

Claim 4. **[Original]** The aqueous gel medium of claim 3, wherein said reducing reagent is selected from the group consisting of 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 5 **[Original]** The aqueous gel medium of claim 4, wherein said reducing reagent is dithiothreitol (DTT).

Claim 6. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ **claim 37**, wherein said one or more reagent(s) include a metal ion chelator.

Claim 7. **[Currently Amended]** The aqueous gel medium of claim 6, wherein said ~~reducing reagent~~ **metal ion chelator** is ethylenediaminetetraacetic acid (EDTA).

Claim 8. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ **claim 37**, wherein said ~~non-crosslinked~~ hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

- Claim 9. **[Currently Amended]** The aqueous gel medium of claim 8, wherein said ~~non-crosslinked~~ hydrophilic polymer is dextran.
- Claim 10. **[Currently Amended]** The aqueous gel medium of claim 9, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a ~~non-cross-linked~~ structure composed of approximately 95% alpha-D-(1-6) linkages.
- Claim 11. **[Cancelled].**
- Claim 12. **[Currently Amended]** The aqueous gel medium of ~~claim 11~~ claim 37, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 13. **[Original]** The aqueous gel medium of claim 12, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.
- Claim 14. **[Original]** The aqueous gel medium of claim 13, wherein said alcohol is glycerol.
- Claim 15. **[Original]** The aqueous gel medium of claim 14, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 16. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ claim 37, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.
- Claim 17. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ claim 37, wherein said aqueous gel medium has a pH of  $8.1 \pm 0.1$ .

Claim 18. **[Currently Amended]** The aqueous gel medium of ~~claim 1~~ claim 37, wherein said analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides and nucleic acid molecules.

Claims 19-20. **[Cancelled]**

Claim 21. **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ claim 38, wherein said one or more reagent(s) that function to keep analytes in a reduced form include a reducing reagent.

Claim 22. **[Original]** The capillary electrophoresis system of claim 21, wherein said reducing reagent is selected from the group consisting of: 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 23. **[Original]** The capillary electrophoresis system of claim 22, wherein said reducing reagent is dithiothreitol (DTT).

Claim 24. **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ claim 38, wherein said one or more reagent(s) include a metal ion chelator.

Claim 25. **[Currently Amended]** The capillary electrophoresis system of claim 24, wherein said ~~reducing reagent~~ metal ion chelator is ethylenediaminetetraacetic acid (EDTA).

Claim 26. **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ claim 38, wherein said ~~non-crosslinked~~ hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

Claim 27. **[Currently Amended]** The capillary electrophoresis system of claim 26, wherein said ~~non-crosslinked~~ hydrophilic polymer is dextran.

- Claim 28.     **[Currently Amended]** The capillary electrophoresis system of claim 27, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a ~~non-cross-linked~~ structure composed of approximately 95% alpha-D-(1-6) linkages.
- Claim 29.     **[Cancelled].**
- Claim 30.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 29~~ **claim 38**, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 31.     **[Original]** The capillary electrophoresis system of claim 30, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.
- Claim 32.     **[Original]** The capillary electrophoresis system of claim 31, wherein said alcohol is glycerol.
- Claim 33.     **[Original]** The capillary electrophoresis system of claim 32, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 34.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ **claim 38**, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.
- Claim 35.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ **claim 38**, wherein said aqueous gel medium has a pH of  $8.1 \pm 0.1$ .
- Claim 36.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 19~~ **claim 38**, wherein said analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides, polysaccharides, and nucleic acid molecules.

- Claim 37.     **[New]** An aqueous gel, said gel having a structural framework and rigidity, wherein said aqueous gel consists essentially of:
- (A)     an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3 and containing:
    - (1)     sodium dodecyl sulfate;
    - (2)     an alcohol; and
    - (3)     one or more reagent(s) that function to keep analytes in a reduced form; and
  - (B)     a hydrophilic polymer dissolved in said buffer solution, wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity.
- Claim 38.     **[New]** A capillary electrophoresis system comprising a capillary tube containing an aqueous gel, said gel having a structural framework and rigidity, wherein said aqueous gel consists essentially of:
- (A)     an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3 and containing:
    - (1)     sodium dodecyl sulfate;
    - (2)     an alcohol; and
    - (3)     one or more reagent(s) that function to keep analytes in a reduced form; and
  - (B)     a hydrophilic polymer dissolved in said buffer solution, wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity.
- Claim 39.     **[New]** A capillary electrophoresis system comprising a capillary tube containing an aqueous gel, said gel having a structural framework and rigidity, wherein said aqueous gel comprises:
- (A)     an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3 and containing:

- (1) sodium dodecyl sulfate;
  - (2) an alcohol; and
  - (3) one or more reagent(s) that function to keep analytes in a reduced form; and
- (B) a hydrophilic polymer dissolved in said buffer solution, wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity;
- and wherein said gel forms a dynamic coating on the inner surface of said capillary tube.

Claim 40. [New] The capillary electrophoresis system of claim 39, wherein said one or more reagent(s) that function to keep analytes in a reduced form include a reducing reagent.

Claim 41. [New] The capillary electrophoresis system of claim 40, wherein said reducing reagent is selected from the group consisting of:  
2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 42. [New] The capillary electrophoresis system of claim 41, wherein said reducing reagent is dithiothreitol (DTT).

Claim 43. [New] The capillary electrophoresis system of claim 39, wherein said one or more reagent(s) include a metal ion chelator.

Claim 44. [New] The capillary electrophoresis system of claim 43, wherein said metal ion chelator is ethylenediaminetetraacetic acid (EDTA).

Claim 45. [New] The capillary electrophoresis system of claim 39, wherein said hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

- Claim 46. [New] The capillary electrophoresis system of claim 45, wherein said hydrophilic polymer is dextran.
- Claim 47. [New] The capillary electrophoresis system of claim 46, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a structure composed of approximately 95% alpha-D-(1-6) linkages.
- Claim 48. [New] The capillary electrophoresis system of claim 39, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 49. [New] The capillary electrophoresis system of claim 48, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.
- Claim 50. [New] The capillary electrophoresis system of claim 49, wherein said alcohol is glycerol.
- Claim 51. [New] The capillary electrophoresis system of claim 50, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 52. [New] The capillary electrophoresis system of claim 39, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.
- Claim 53. [New] The capillary electrophoresis system of claim 39, wherein said aqueous gel medium has a pH of  $8.1 \pm 0.1$ .
- Claim 54. [New] The capillary electrophoresis system of claim 39, wherein said analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides, polysaccharides, and nucleic acid molecules.